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EXAMINER

NGUYEN, BRIAN D

ART UNIT PAPER NUMBER

2661

DATE MAILED: 04/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,227

Applicant(s)

HAMALAINEN, SEPPPO

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed 4/5/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-13 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 4-6, 14-16, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. It is suggested to delete the word: "either" after "is" in line 16 of the abstract.

Claim Objections

2. Claim 22 is objected to because of the following informalities:

Claim 22, line 6, "the first and second quality indicators" seems to refer back to a first and second indication of the quality of the signal in lines 5-6 and 11-12. If this is true, it is suggested to change "the first and second quality indicators" to ---the first and second indication of the signal quality---.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7-8, 10-13, 17-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Engstrom et al (6,639,934).

Regarding claim 1, Engstrom discloses method of deciding whether to perform link adaptation (see col. 3, lines 4-7) for communication from a first communication device (base station) to a second communication device (mobile station), the second communication device

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examining a signal received from the first communication device and providing a first indication of the quality of the signal as received by the second communication device, the method comprising the steps of: recording the first indication of the quality of the signal (SIR) as received by the second communication device ; providing a second indication of the quality of the signal (SIR target); and deciding to perform link adaptation based on the first and second indication of the quality of the signal (see figure 5A & 6A; col. 1, lines 25-43; col. 5, lines 9-33; col. 6, lines 24-38) .

Regarding claim 2, Engstrom discloses the first indication of the quality of the signal as received by the second communication device is either an SIR estimate (see figure 5A), or an ACK/NACK signal, or an FER (see figure 6A) or BLER or corresponding statistic collected over a predetermined time period.

Regarding claim 3, Engstrom discloses the second indication of the quality of the signal as received by the second communication device is either an SIR target value (see figure 5A), a changed SIR target value, an ACK/NACK signal, or a signal derived from a series of consecutive ACK/NACK signals.

Regarding claim 7, Engstrom discloses the first communication device is selected from the group consisting of a mobile station and a base station and the second communication device is the other device in the group consisting of the mobile station and the base station (see col. 1, lines 7-11; col. 4, lines 59-67).

Regarding claim 8, Engstrom discloses either the first communication device or the second communication device perform one or more of the steps of recording the first indication

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of the quality of the signal, providing a second indication of the quality of the signal, and deciding to perform link adaptation (see col. 3, lines 4-7; col. 4, lines 59-67).

Regarding claim 10, Engstrom discloses the signal for which the indication of the quality of the signal as received by the second communication device is used as a basis for a link adaptation decision is different from, but associated with, the signal for which the link adaptation decision is made (see figures 5A & 6A; col. 5, lines 9-33; col. 6, lines 24-38).

Regarding claims 11-13, 17-18, and 20, claims 11-13, 17-18, and 20 are apparatus claims that have substantially all the limitations of the respective method claims 1-3, 7-8, and 10. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al (6,639,934) in view of Sebastian Knutsson et al (6,085,108).

Regarding claims 9 and 19, Engstrom does not specifically disclose an RNC performs one or more of the steps. However, to perform one or more of the steps in the mobile, base, or RNC is a matter of design choice. Knutsson discloses a RNC perform one or more of the steps (see col. 3, lines 4-21). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the RNC performs one or more of the steps as

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taught by Knutsson in the system of Engstrom in order to meet specific needs such as to minimize the size of a mobile unit.

Allowable Subject Matter

7. Claims 4-6, 14-16, and 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1-3, 7-13, and 17-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian Nguyen

4/18/04